

THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant(s): Cupp et al.  
Appl. No.: 10/037,941  
Conf. No.: 7917  
Filed: January 3, 2002  
Title: DENTAL DIET FOR REDUCING TARTAR  
Art Unit: 1761  
Examiner: C. Sayala  
Docket No.: 115808-330

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPELLANTS' REPLY BRIEF**

Sir:

**I. INTRODUCTION**

Appellants submit Appellants' Reply Brief in response to the Examiner's Answer dated August 6, 2008 pursuant to 37 C.F.R. § 41.41(a). Appellants respectfully submit the Examiner's Answer has failed to remedy the deficiencies with respect to the Final Office Action dated January 29, 2008, as noted in Appellants' Appeal Brief filed on June 23, 2008, for at least the reasons set forth below. Accordingly, Appellants respectfully request that the rejections of pending Claims 1-33 be reversed.

**II. THE REJECTION OF CLAIMS 1-20 AND 25-33 UNDER 35 U.S.C. § 103(a)**  
**SHOULD BE REVERSED BECAUSE THE EXAMINER HAS FAILED TO ESTABLISH**  
**A PRIMA FACIE CASE OF OBVIOUSNESS**

Appellants respectfully request that the Board reverse the obviousness rejection because the Examiner has still failed to establish a *prima facie* case of obviousness in view of the combination of *Hand* in view of *Collings* in view of *Speck* and further in view of *Procter*. Specifically, *Hand*, *Collings*, *Speck* and *Procter* fail to disclose each and every limitation of the present claims. Moreover, there exists no reason why the skilled artisan would have combined *Hand*, *Collings*, *Speck* and *Procter* to arrive at the presently claimed subject matter.

Independent Claims 1, 7, 18, 20, 25, 28 and 31 recite, in part, a dried pet food having an unstriated appearance, a density that ranges from about 16.8 lbs/ft<sup>3</sup> to about 20 lbs/ft<sup>3</sup>, and specified dimensions. In contrast, Appellants respectfully submit that the cited references fail to disclose each and every element of independent Claims 1, 13, 18, 21 and 28.

Appellants respectfully submit that, even if the cited references are combinable, the cited references, either alone or in combination, fail to disclose each and every element of the present claims. For example, because neither *Hand*, *Collings*, nor *Procter* teaches the claimed density of an unstriated pet food product, the Examiner cites to *Speck* as establishing that it was known in the art at the time the invention was made to adapt an extruder's flow characteristics in order to control the density of kibble. See, Examiner's Answer, pages 11-12. However, even assuming that *Speck* discloses modifying an extruder's flow characteristics to modify bulk density of an extrudate, *Speck* fails to disclose or suggest any density of a pet food product, let alone the density of an unstriated dried pet food, as required, in part, by the present claims.

Appellants respectfully submit that the texture of the presently claimed pet food composition is an important aspect of the invention and is, in turn, a product of the manner in which the pet food composition is manufactured. For example, the unstriated cellular structure of the present pet food has a dense foam-like structure that is different than previous pet foods and improves the tartar reducing properties of the product. This unstriated cellular structure is a result, in part, of the turbulent flow used in the manufacture of the pet food. See, specification, [0049-0050]. Accordingly, Appellants respectfully submit that unstriated structures produced from turbulent flow would have different densities when compared to similar-sized striated

structures produced by, for example, laminar flow, as is the case with *Hand*. Thus, Appellants respectfully submit that the density of an unstriated product is an important limitation to the presently claimed subject matter.

In contrast, the Examiner maintains that because "*Hand* discloses 10 to 33 lb/cu. ft" and because "*Speck* et al. teaches how to extrude kibbles in such a way as to not only control the bulk density of a kibbled product but to maintain the bulk density at a predetermined bulk density during extrusion," Appellants' claimed invention cannot be said to be inventive. See, Examiner's Answer, pages 11-12. However, Appellants disagree and respectfully submit that, for at least the reasons discussed above and in Appellants' Appeal Brief, simply because *Hand* may disclose a density of a striated pet food product between 10 and 33 lb/ft<sup>3</sup>, such a disclosure does not make the claimed density of an unstriated dried pet food obvious when combined with *Speck*, which fails to disclose or suggest any density of a pet food product, let alone the density of an unstriated dried pet food, as required, in part, by the present claims.

Moreover, the skilled artisan would immediately appreciate that pet foods manufactured by turbulent flow are entirely distinguishable from pet foods manufactured by laminar flow. Accordingly, if the Examiner were allowed to pick apart limitations of the present claims in order to find references to disclose each and every word of the present claims, Appellants respectfully submit that any invention could be rendered obvious. In contrast, however, the cited references fail to disclose or suggest the density of an unstriated dried pet food, as required, in part, by the present claims and, therefore, fail to render obvious the presently claimed subject matter.

Appellants also respectfully submit that neither *Hand*, *Collings* nor *Procter* disclose or suggest the claimed sizes of the pet food compositions as recited in Claims 1 and 13. Specifically, neither *Hand*, *Collings* nor *Procter* disclose or suggest pet food products that average 0.53 inches in three dimension as is required, in part, by Claims 1 and 13. Instead, neither *Hand* nor *Collings* teaches the width of the dried pet food and *Procter* only indicates that the kibble may not be of a size greater than about ½ inch with an average measurement in three dimensions.

The Examiner alleges that "appellant states that *Procter*'s 'about ½ inch' should be read as '1/2 inch' without consideration of the 'about.'" See, Examiner's Answer, page 12, lines 9-10. However, Appellants respectfully disagree and direct the Examiner's attention to page 13 of

Appellants' Appeal Brief at lines 6-8 where Appellants clearly state that "[t]aken in its 'technological and stylistic context' in this case, the skilled artisan would recognize that *Procter* is directed toward a kibble size that is not greater than 0.50, *accounting for slight variations either way*. (emphasis added). Accordingly, Appellants do not require that *Procter* be interpreted as exactly 0.50 but, rather, state that *Procter* may be interpreted to allow for "slight variations either way." Even considering these slight variations, however, Appellants maintain that the skilled artisan would consider 0.53 to be greater than the 0.50 disclosed by *Procter*. As such, neither *Hand*, *Collings* nor *Procter* disclose or suggest the claimed sizes of the pet food compositions as recited in Claims 1 and 13 and, therefore, fail to render the present claims obvious.

Further, Appellants also respectfully submit that there exists no reason why the skilled artisan would combine the cited references to arrive at the present claims. For example, Appellants respectfully submit that the previously submitted *Affidavit* shows that (1) the unstriated appearance and inner cellular structure resulting from a turbulent flow process significantly affects the performance of the claimed pet food as compared to other products of a striated appearance and (2) based on rheological and acoustic testing of the unstriated product of the present invention versus other striated products, these products are clearly different and present different functionalities in terms of dental plaque and tartar reduction. As a result, the skilled artisan would not find any reason to combine a striated pet food product with an unstriated pet food product in the absence of hindsight. For example, *Collings* is directed toward an unstriated dog food product. *Hand*, by contrast, is directed toward an expanded, striated structural matrix, which teaches away from *Collings* and the product of the present invention.

The Examiner maintains that "*Hand* teaches both forms: striated and unstriated and teaches the striated product. See, Examiner's Answer, page 13, line 10. However, Appellants submit that, at best, *Hand* distinguishes turbulent flow from laminar flow and emphasizes that the product in *Hand* is created using laminar flow conditions that result in a product with an expanded striated structural matrix. As such, *Hand* teaches away from unstriated food product such as the product in *Collings*. In fact, the Examiner even admits that "[*Hand*] does not teach that its product is unstriated." See, Final Office Action, page 3, line 10.

The Examiner also takes issue with Appellants statement that "a comparison of the presently claimed product with a 'standard dry dog food' provides the proper 'nexus' and a

‘reasonable standard for comparison’ as shown in the *Affidavit*. For example, the Examiner cites *Hand* as disclosing that “turbulent flow is the normal flow condition of extruded plasticized animal food products.” Appellants respectfully submit that since Alpo Complete and Purina Dog Chow are dry dog food products in the form of kibble, the skilled artisan would appreciate that these compositions are most likely “extruded plasticized animal food products,” which the Examiner admits are normally produced by turbulent flow. As such, Appellants respectfully submit that Alpo Complete and Purina Dog Chow would likely be characterized by the skilled artisan as “standard” dog foods that are produced via “normal” flow conditions. Therefore, Appellants respectfully submit that a comparison between a “standard” dog food produced via turbulent flow and the presently claimed dog food produced by turbulent flow is a reasonable standard for comparison, although maybe not the only standard for comparison. However, Appellants respectfully submit that a reasonable standard for comparison should suffice so long as the comparison is relevant to the rejections. As discussed above, the comparison is relevant to the rejections by comparing two pet food products that are produced by turbulent flow.

Further, for at least the reasons set forth in detail in Appellants’ Appeal Brief, Appellants respectfully submit that not only does the disclosure of *Collings* teach away from the use of the composition and process of *Hand* to manufacture a dog treat food product, but *Collings* and *Hand* are also directed to completely different objectives. While *Collings* is directed to manufacturing a dog treat product with strong structural integrity and resistance to breakage within packaging, *Hand* is directed to a pet food product that exhibits improved mechanical tooth cleansing function. As such, Appellants respectfully submit that the skilled artisan would have no reason to combine the cited references to arrive at the present claims.

For the reasons discussed above, Appellants respectfully submit that Claims 1-20 and 25-33 are novel, nonobvious and distinguishable from the cited reference.

Accordingly, Appellants respectfully request that the rejection of Claims 1-20 and 25-33 under 35 U.S.C. §103(a) be withdrawn.

**III. THE REJECTION OF CLAIMS 21-24 UNDER 35 U.S.C. § 103(a) SHOULD BE REVERSED BECAUSE THE EXAMINER HAS FAILED TO ESTABLISH A *PRIMA FACIE* CASE OF OBVIOUSNESS**

Appellants respectfully submit that the obviousness rejection of Claims 21-24 should be reversed because the Examiner has failed to establish a *prima facie* case of obviousness. In the Office Action, the Examiner alleged that the combination of *Hand* and *Collings* in view of *Speck* and *Procter* and further in view of *Staples* and *Simone* renders the claimed subject matter obvious. However, the Examiner fails to establish a *prima facie* case of obviousness in each rejection because, even if combinable, the cited references fail to disclose each and every limitation of the present claims.

Independent Claim 21 recites, in part, a dried pet food having a first sized kibble and second sized kibble, the first sized kibble being larger than the second, at least one kibble having an unstriated appearance and a density that ranges from about 16.8 lbs/ft<sup>3</sup> to about 20 lbs/ft<sup>3</sup>. The unstriated product (versus striated) of the present invention, which stems from turbulent rather than laminar flow extrusion, results in a dried pet food having a cellular structure that includes microscopic air pockets. See, specification, page 8, lines 17-24. In contrast, Appellants respectfully submit that, even assuming that there exists a reason for the skilled artisan to combine the cited references, the cited references are deficient with respect to Claims 21-24.

For example, the cited references fail to disclose a pet food comprising at least two different sized kibbles including a first sized kibble and a second sized kibble wherein the first sized kibble is larger in size than the second sized kibble, wherein the first sized kibble and the second sized kibble are present in a ratio of approximately 20 to about 80% to approximately 80 to about 20% as required, in part, by independent Claim 21. Instead, *Hand* discloses a finished product where a uniform extruded strand is cut into thick disc-shaped pellets of the same length. See, *Hand*, column 8, lines 12-17. Similarly, *Collings* discloses a uniform extruded strand cut into equally thick wavy-shaped chips. See, *Collings*, page 6, lines 1-4.

The Examiner maintains that “*Hand* discloses a range of lengths 0.32 to 0.75” in order to form pieces or pellets (col. 5, line 62) in shapes that are cylindrical or disc-shaped (col. 5, line 9).” See, Examiner’s Answer, page 15, lines 16-17. In contrast, Appellants submit that the Examiner has misconstrued this disclosure.

For example, column 8, lines 16-17 of *Hand* illustrates a portion of an Example in which the strand “was cut into 0.50 inch thick disc-shaped pellets.” Thus, Appellants respectfully submit that the disclosure cited by the Examiner merely illustrates that the pellets may be cut into varying sizes during manufacturing, but that each of the pellets cut from that strand is cut into the same size as the others. For example, a strand may be cut to form pellets that are all 0.50 inches. Alternatively, a strand may be cut to form pellets that are all 0.6 inches. However, Appellants respectfully submit that the strands are not cut to form pellets of varying size from one strand that are present in a ratio of approximately 20 to about 80% to approximately 80 to about 20% as required, in part, by independent Claim 21. Indeed, a novel element of Appellants’ invention is the presence of pellets of varying size within the same composition in a ratio of approximately 20 to about 80% to approximately 80 to about 20%. At no place in the disclosure does *Hand* disclose or even suggest the presence of pellets of varying size within a same pet food composition.

For the reasons discussed above, Appellants respectfully submit that Claim 21 and Claims 22-24 that depend from independent Claim 21 are novel, nonobvious and distinguishable from the cited reference.

Accordingly, Appellants respectfully request that the rejection of Claims 21-24 under 35 U.S.C. §103(a) be withdrawn.

For at least the foregoing reasons, Appellants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same.

**IV. CONCLUSION**

For the foregoing reasons, Appellants respectfully submit that the Examiner's Answer does not remedy the deficiencies noted in Appellants' Appeal Brief with respect to the Final Office Action. Therefore, Appellants respectfully request that the Board of Appeals reverse the rejections with respect to Claims 1-33.

No fee is due in connection with this Reply Brief. The Director is authorized to charge any fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 115808-330 on the account statement.

Respectfully submitted,

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